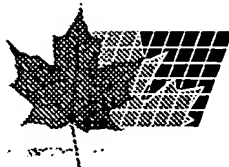


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(12) (19) (CA) **Demande-Application**

(21) (A1) **2,201,429**

(22) 1997/04/01

(43) 1998/10/01

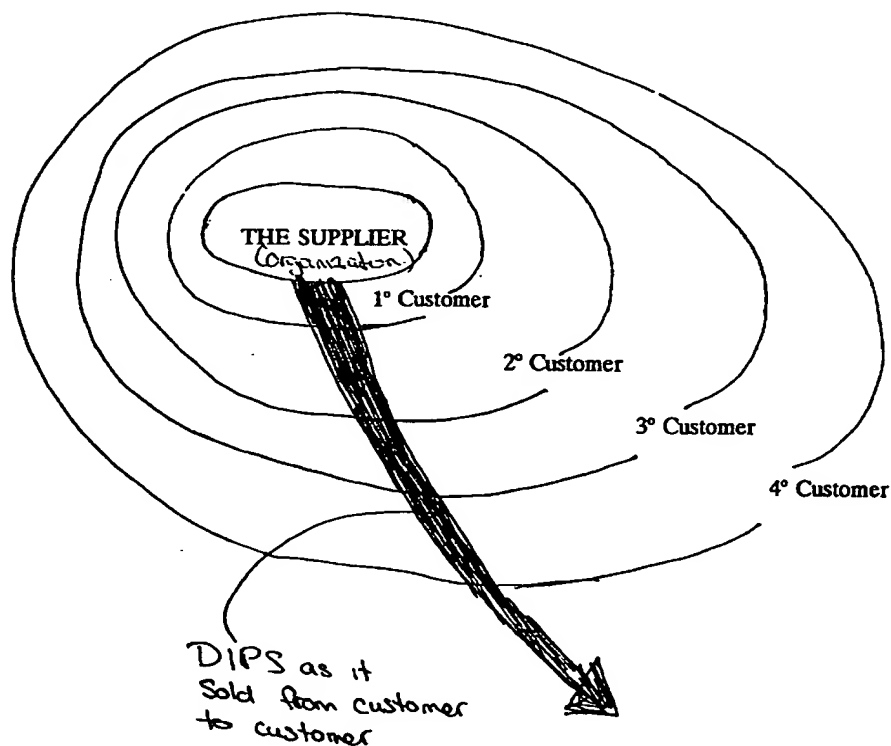
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(51) Int. Cl.⁶ G06F 17/60

(54) **UN PROCEDE PERMETTANT D'EVALUER LES ACTIFS DE
NATURE INTELLECTUELLE**

(54) **A METHOD FOR VALUING INTELLECTUAL ASSETS**



Industrie Canada Industry Canada

A Method for Valuing Intellectual Assets

TECHNICAL FIELD

5 The present invention is related generally to a method of measuring and valuing an organization's intellectual and/or intangible assets. Specifically, the present invention is related to a novel process of valuing soft assets, such as programming knowledge, operational databases and/or intangible assets, such as knowledge, experience, and information. Information gained through using this method can be used in many ways by the organization.

BACKGROUND OF INVENTION

10 Appreciation is growing in the 1990's for those aspects of "valuable" companies that makes them valuable, beyond the assets evidenced by traditional accounting systems. These newly recognized assets are those that are implicitly recognized when someone states, "Company X is a great company because it's "well-run", or "when we have a problem, we hire Company Y because we know they will get the job done right" or, "we hire Company Z, because we know they have the
15 talent and ingenuity to be able to solve our problem." These are the assets of a company that include notions such as creativity, innovation, cohesiveness, fairness, etc., - the aspects that make a good company good. Because these are not tangible assets such as equipment or real property, but are knowledge-based, these assets are becoming known collectively as "intellectual capital."

20 In the new economy, intellectual capital is being taken more and more seriously, to the extent that some banks are even beginning to consider some of these assets to be a better credit risk than "hard" assets. Moreover, the U.S. Securities and Exchange Commission is presently holding meetings to discuss generating definitions of intellectual capital as it pertains to market valuation of stocks, and the Internal Revenue Service is investigating the possibility of defining and classifying aspects of intellectual capital as a new source of taxable assets.

25 Intellectual Capital is a knowledge-based asset created by the interaction (often synergistic) of the skill, information, and experience acquired by an organization to perform its varied activities, including product development (products and/or services), marketing, sales, organizational management, etc., that enable it to grow and prosper. It can be seen as the total value of a

supplier (company or other organization) minus its hard assets, where total value can be approximated by, but not limited to, its market value. Intellectual Capital goes beyond reputation, good-will, and intellectual property, such as patents and trademarks, to encompass qualities of innovation, experience, management expertise, vision in the senior management, communication channels within the organization, etc.

Thus, intellectual capital is an aspect of a business that was intuitively recognized, but now, in the age of information technology and the expansion of service oriented companies, is becoming formerly recognized, defined and classified. Some traditional intellectual assets, such as patents, copyrights, trademarks and good-will are well known, established pieces of intangible property that have been cultivated, leveraged and sold just as real property. Now, the value of newly recognized intellectual assets are being conceptualized and added to the list of assets comprising intellectual capital.

Components of intellectual capital can be categorized on the basis of the extent to which the have been formally recognized into 1) Traditional Intellectual Assets comprising Intellectual Property: patents, trademarks, copyrights, good-will and reputation (traditionally estimated by market-value); 2) Semi-Recognized Intellectual Assets comprising know-how and experience, education around a functional expertise, for example, educational degrees and years experience in a position (the market-value for someone based on their resume); and 3) Newly Emerging Intellectual Assets including internal processes, knowledge, skills, information, data and experience that companies gather and use to make effective and efficient decisions. One manner of identifying, defining and valuing an new intellectual assets is to analyze *knowledge-based transactions* that occur between a supplier and its customer.

Knowledge of a company's intellectual assets is useful to inform many kinds of business decisions. For example, knowledge of a company's intellectual assets can be useful to *inform self-analysis* for development, cultivation and management of internal resources - in this fashion, assessment of intellectual assets shows a company where their strengths and weaknesses are, allowing them to determine areas that need to be bolstered and possibly departments that should be tailored. Knowledge of intellectual assets can also form the basis for *decisions regarding market direction* assisting determination of realistic opportunities for growth within the market, as a means for measuring and responding to market forces. Some assets of intellectual capital can be used as *bank collateral*, if they are sufficiently defined and package to constitute a source of marketable value. For example, companies are using computer networking systems to create electronic libraries and forums to capture employees' knowledge and experience, generating a shared

organizational asset. Information regarding information capital of other companies can help assess the profitability of *partnering or acquiring* them, a sort of health assessment of potential partners. Clear awareness of a company's intellectual assets can help to design effective *marketing/advertising* that will clearly inform potential customers of ways in which qualities of their services (intellectual assets) are superior in the market.

Several major companies are beginning to make managing intellectual capital a business reality by attempting to evaluate their intellectual capital, by identifying it, managing it to enhance its growth, and making "company shaping" decisions based upon an appreciation of its value to maximize it. Formal appreciation of these assets is beginning to impact human resources strategy and change the design of business operations. These companies are among the first to act upon the belief that it is possible to describe and measure how knowledge adds value, and that managing intellectual capital improves financial performance of the company.

The biggest financial services company in Scandinavia, Skandia Group, was the first corporation to hire someone to act as director of intellectual capital to Skandia Assurance & Financial Services, its largest and reportedly fastest-growing division, with a 1993 gross premium income (\$2.2 billion) being 39% of Skandia's total. The responsibility of this director is to capture the assets of intellectual capital, to conceptualize the hidden values and create new images by which to describe them. Three principles evolved with this post: first, the value of intellectual assets exceeds by many times the value of assets that appear on the balance sheet; second, intellectual capital is the raw material from which financial results are made; and third, managers must distinguish between two kinds of intellectual capital, human and structural. Human capital is the source of innovation and renewal, but whose cultivation requires structural intellectual assets, such as information systems, knowledge of market channels and customer relationships and management focus, which turn individual know-how into the property of a group.

Another example of one of the pioneering companies is Canadian Imperial Bank of Commerce (CIBC), North America's seventh-largest bank, with \$107 billion in assets. They have created a model of intellectual capital beginning with the definition that intellectual capital is the asset created from the interplay of human capital, structural capital and customer capital. To manage this asset, CIBC is measuring, managing and cultivating the individual skills needed to meet customers' needs (human capital), the organizational capabilities demanded by the market (structural capital), and the strength of its franchise (customer capital).

Another early attempt was seen in 1993 when Dow Chemical created a new position in its

company, director of intellectual asset management to cultivate the most traditional of intellectual assets, patents. By organizing its extensive patent portfolio, Dow saved more than \$1 million in its first 18 months. Dow's strategy for intellectual capital management comprises six steps:

- 1) define the role of knowledge in the business;
- 2) assess competitors' strategies and knowledge assets;
- 3) classify the knowledge portfolio into what the organization owns, what they use, and where the asset belongs;
- 4) evaluate what the assets are worth, what they cost, what will it take to maximize their value, whether they should be retained, sold or abandoned;
- 5) based on what was learned through the assessments listed above, identify gaps that must be filled to exploit knowledge or holes that should be plugged to fend off rivals and either direct R&D there, or look for technology to license;
- 6) assemble the new knowledge portfolio and repeat steps 1-6.

Some systems or methods focus on the customer/company interface to design company policy and action. For example, Renaissance Solutions, a consulting firm in Lincoln, Massachusetts developed a concept called the *balanced scorecard* to supplement traditional financial measures with criteria that measured performance from three additional perspectives - (1) those of customers, (2) internal business processes, and (3) learning and growth, to assist companies to track financial results while simultaneously monitoring progress in building the capabilities and acquiring the intangible assets they would need for further growth.

The scorecard allows managers to introduce four new management processes that, separately and in combination, contribute to linking long-term strategic objectives with short term actions. These processes are: "translating the vision", which is a term that means a process that helps managers to build a consensus around the organization's vision and strategy; "communicating and linking", which lets managers communicate their strategy "up and down" the organization and link it to departmental and individual objectives; "business planning", which enables companies to integrate their business and financial plans; and "feedback and learning", which gives companies the capacity for strategic learning. The process of "translating the vision" examines the customer/company interface and leads to asking four questions:

- 1) To succeed financially, how should we appear to our shareholders?
- 2) To achieve our vision, how should we appear to our customers?
- 3) To satisfy our shareholders and customers, at what business processes must we excel?
- 4) To achieve our vision how will we sustain our ability to change and improve?

This process is company-centric in that the company is trying to determine how they *should appear* to their customers and what business processes they think they must excel at to satisfy their customers. A company following this method might even go so far as to question key customers to learn how the customers think the company should appear and what processes at which they think the company should excel. However, there is no data collected or analysis performed thereof to determine how the customers use the company's products and services and what value these bring the customers and how they impact the finances of the customers. However, this model, like all of its predecessors is hierarchical, with change being delivered top-down, rather than growing up from the roots of the supplier/customer interface.

What is, therefore needed is a customer-centric method of valuing intellectual assets, that dynamically (eg. non-static) identifies, defines and assesses the intellectual assets in relation to their value to the customer (the marketplace).

SUMMARY OF INVENTION

It is, therefore, an object of the present invention, in its broadest sense, to provide a method of determining, measuring and valuing an organization's intellectual assets based on analysis of how an organization's data, information, products, services, etc, (hereinafter referred to as DIPS) are used, what DIPS are of value to, and how DIPS financially affect an organization's customers and relationships with those customers. This method comprises collecting data (including financial) from customers and using it to identify and value intellectual assets. Information acquired using this method has many useful applications for the organization and the method itself can be used to model an artificial intelligence system for predictive analyses.

Other objects and advantages will become evident from the following detailed description of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIGURE 1 presents a graphic representation of a customer-centric supplier (organization).

FIGURE 2 depicts a graphic representation of an organization comprising a supplier

(organization) and many 1° and 2° customers, both internal and external. In this example, the supplier is the Systems Management Database Department, and a product they supply to their internal customers (management - depicted in the rectangles) are reports. The management uses the information in the reports to supply their internal and external customers depicted by the triangles. The value of the information passed onto the customers in the outer circle is affected by the factors delineated with arrows (eg. trends, competition, market drives, etc.).

FIGURE 3 depicts a graphic representation of the method of valuing intellectual assets.

DETAILED DESCRIPTION OF THE INVENTION

The present invention provides a method that can be used to value intellectual assets. As a corollary to this method, previously unrecognized intellectual assets are identified and defined. This method therefore constitutes a new and useful tool to assist suppliers to identify and estimate the value of their intellectual assets.

This method is new because it draws upon customer information, particularly financial data, whereas methods in the prior art focus on analysis of supplier information. Because of the source of information, this method uniquely allows a supplier to align itself with the marketplace and to anticipate and dynamically respond to changes in the marketplace.

In accordance with the present invention and as used herein, the following terms are defined with the following meanings, unless explicitly stated otherwise.

In this model, suppliers and customers can be objects, persons, companies, organizations, governments, nations, etc.. The customer can be internal to the same organization as the supplier, such as when one department (the supplier) provides services to another department (the customer) within an organization (eg. the opinions generated by a legal department for the human resources department), or the customer can be external to an organization, such as when a manufacturer (the customer) hires the services of a transport service (the supplier) to deliver its goods.

Intellectual Capital is a knowledge asset created by the interaction of the skill, information, data and experience, etc. acquired by a supplier as it performs its varied activities, including product development (products and/or services), marketing, sales, organizational management, etc., that

enable it to grow and prosper. It can be seen as the total value of a supplier minus its hard assets, where total value is not limited to market value. Intellectual Capital can be classified into at least three areas: human, structural, and market (customer). Human capital comprises the assets that individuals bring to and create in the organization out of knowledge, experience, innovation, creativity and resourcefulness, etc. Structural capital (eg. information systems, knowledge of market channels and customer relationships and management focus) is necessary to exploit human capital. Market capital is the loyal customer/client base that supports the supplier.

The term, *act*, is used to conceptually encapsulate any data, information, product, service (service, also being defined in the broadest sense to include financing, credit, modes of billing, advice, etc.), communication etc. that occurs between the supplier and the customer. Thus, *act* can be used in a manner analogous to *product*, in conventional descriptions where *goods* are sold between a supplier and a customer.

DIPS is an acronym used to refer to, but not limited to, the supplier's data, information, products, services, etc. that are transferred to the customer. It includes knowledge-based transactions.

Operational Assessment is defined by the equation $R = (PO/T_c)(S)$, where PO is the performance outcome, T_c is the completion time required to accomplish a PO, S is a quality/service standard (S), and R is the rate of accomplishing a performance outcome to a certain standard. This equation describes an act between supplier and customer that occurs at a certain standard, within a certain time frame.

A customer-centric organization is one where the organization's business strategy is aligned with the customer's use of the supplier's product or service, the customer's performance outcomes and financial constraints. The relationship between the supplier and the customers when there are more than one customer can be conceptualized as concentric circles where the innermost circle is the supplier, the first circle, adjacent to the innermost circle is the primary customer, the next circle, adjacent to the circle representing the primary customer represents the secondary customer (the customer's customer), the next circle, adjacent to the circle representing the secondary customer represents the tertiary customer (the customer's customer's customer), and so on, as pictured in Figure 1. This representation demonstrates the radiating effect of an act that can exist between a supplier, its customer and potentially successive customers.

Customer can be internal or external to the organization. This definition of customer is the most generic, whenever there is a giver and a receiver of DIPS, encompassing any two people or

departments that need to communicate about a product, service, data or outcome. For example, a customer of a person in the engineering department could be the manufacturing department. An graphic example of an organization wherein one department is the supplier to many types of internal and external customers is presented in Figure 2.

5 In the most general description of the present invention, the method comprises, but is not limited to, the following steps. This method is described conceptually and pictorially in Figure 3.

- 1) Construct a data base comprising qualitative information regarding the act(s) that occur between the supplier and the customer. The performance outcomes, time frames and standards for the data, information, products and/or services (DIPS) must be included. This step builds data base #1, the first domain of information;
- 10 2) Construct another data base comprising financial data relating to the act(s) that occurs between the supplier and the customer. This data may include down-line value if the customer sells the DIPS to their customer;
- 3) Use information from data base #1 to define an act between the supplier and customer that occurs to a certain standard, within a certain time frame, by determining the Operational Assessment equation .
- 15 4) Analyze information in data bases #1 and #2 to identify and define a list comprising the supplier's assets.
- 5) Using the Operational Assessment equation, assess the impact of changes in a said asset *from the point of view of the customer*. Include in this assessment the financial impact on the customer associated with changes in an asset.
- 20 6) Using the Operational Assessment equation assess the impact of changes in a said asset *as it affects customer relationship to the supplier*. Include in this assessment the financial impact to the supplier resulting from changes in customer relationship due to changes in an asset.
- 25 7) The value of a said asset is estimated from analyzing the information obtained in step 5 and 6, weighted by considerations of relevancy to the assessment.

A specific example of how the method can be used is as follows.

- 1) determine customer use(s) of *the supplier's* DIPS. Determine and include performance outcomes, time frames and standards for how *the customer uses the supplier's* DIPS;
- 30 2) acquire customer financial data indicating the value of the supplier's information,

products and/or services to the customer;

- 3) calculate operational assessment equation for *the supplier's* information, products and/or services;
- 4) identify the supplier's assets are that are of particular value to the customer;
- 5) assess whether and to what extent change in an asset would affect the operational assessment equation;
- 6) assess the financial impact to the customer associated with change in this asset;
- 7) assess the financial impact to the supplier associated with change in this asset with respect to how the change:
 - i) impacts customer obtention?
 - ii) impacts customer acceptance?
 - iii) impacts customer retention?
 - iv) impacts use of the DIPS?
- 8) Total the financial impact, if any, from each of these categories (i-iv) and add it to the information gained in step 6. This is the value of the intellectual asset.

This method is applicable to past, present, and future situations.

A preferred mode of working this invention entails using this method for valuing intellectual assets within a system to (re)structure a supplier/organization. For example, in this system, the intellectual asset valuation information would be used as an essential part of a four step process comprising the steps of:

I. Assess Intellectual Capital of the Supplier

- 1) Determine purpose of the supplier/organization;
- 2) Determine whether the supplier has the infrastructure to be operationally efficient;
- 3) Determine whether the individuals in the supplier/organization have the knowledge, skills and competencies to be operationally efficient.
- 4) Answer the following set of questions for determinations 1 - 3 above:
 - i) How do you know?
 - ii) How will you know?
 - iii) How will you measure and quantify performance?

II. Align the supplier's/organization's business strategy, structure and knowledge base with the (internal or external) customer's business strategy by following the following steps:

- 1) determine and communicate the supplier's/organization's performance outcomes and objectives;
- 2) determine and communicate the supplier's/organization's structure;
- 3) determine and communicate the supplier's/organization's knowledge and competencies;
- 4) determine the customers's performance outcomes and objectives;
- 5) determine the customer's structure;
- 6) determine the customer's knowledge and competencies;
- 7) match the supplier's/organization's performance outcomes; objectives, structure, knowledge and competencies so that the supplier's/organization's:
 - i) performance outcomes and objectives complement those of the target customer's requirements;
 - ii) structure is responsive to the target customer's requests for products, service and information;
 - iii) competencies educate the customer's regarding products, service and information;
 - iv) operations are linked to the customer's financial requirements.

III. Determine and Value Supplier/Organization Intellectual Assets

- 1) determine customer use(s) of *the supplier's/organization's* information, products and/or services. Determine and include performance outcomes, time frames and standards for how *the customer uses the supplier's/organization's* information, products and/or services;
- 2) acquire customer financial data indicating the value of the supplier's/organizations information, products and/or services to the customer. This data may include down-line value if the customer sells the product and/or services to their customer;
- 3) calculate operational assessment equation for *the supplier's/organization's* information, products and/or services;
- 4) identify the supplier/organization assets are that are of particular value to the customer;
- 5) assess whether and to what extent change in an asset would affect the operational assessment equation;
- 6) assess the financial impact to the customer associated with change in this asset;
- 7) assess the financial impact to the supplier/organization associated with change in this asset with respect to how the change:

- i) impacts customer obtainment?
- ii) impacts customer acceptance?
- iii) impacts customer retention?
- iv) impacts use of the DIPS?

5 8) Total the financial impact, if any, from each of these categories (i-v) and add it to the information obtained in step 6. This is the value of the intellectual asset.

IV. Re-engineer Supplier/Organization Based on Information acquired in steps I - III in any or all of the areas including, but not limited to:

- 10 1) to *inform self-analysis* for development, cultivation and management internal resources - in this fashion assessment of intellectual capital shows a company where their strengths and weaknesses are; determine areas that need to be bolstered and possibly departments that should be tailored;
- 2) to *inform decisions regarding market direction*; to determine realistic opportunities for growth within the market - a means for measuring and responding to market forces;
- 15 3) tailor marketing/advertising to realistically address customers.

In another preferred mode, this invention can be used to leverage intellectual assets for value by clearly defining, delineating and valuing intellectual assets for financial considerations. For example, as *bank collateral*, if they can be sufficiently defined and "packaged" to constitute a source of marketable value (for example, case reports recording experience that could be sold). Another financial example could arise if an supplier is considering selling off some of its assets, such as a division, it would want to include the value of its intellectual assets in the asking price, for potential buyers.

25 In yet another preferred mode, the present invention provides for the relatively rapid analysis of the complex data interdependencies pertaining to customer/supplier financial data through the application of inference methods and heuristics to dynamic models of customer financial information systems. Thus, an artificial intelligence system can be developed based on this method to generate estimates of intellectual asset value using a predictive model such as a neural network. In such a system this method could be executed relatively rapidly to repeatedly monitor the value of intellectual assets as customer data changes. This type of system would allow a

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organization to make predictive analyses and assist in strategic decisions.

In such a manner the present invention would be used as a learning system, where, from a plural number of examples concerning a given object system (hereinafter called the training examples), properties special to such training examples are extracted experimentally and such properties are
 5 utilized in solving the problem in an unknown example (hereinafter called the input example). For instance, in the field of business operations, it is possible to collect the optimum operation in various conditions of a system as the training examples, to extract the relation between the system conditions and optimum operation, and to use such relation in solving the problem of predicting the optimum operation in the unknown, specific conditions.

10 In such a manner, the predictive model would generate estimates of the value of intellectual assets based on learned relationships among variables describing the operational assessment equation and the financial impact of changes in the supplier's intellectual asset upon the customer. The system may also output reason codes indicating relative contributions of various variables to a particular result, and may generate reports describing intellectual asset valuations, market trend analyses,
 15 and recommendations regarding building or tailoring resources related to an asset.

The present invention will now be illustrated, but is not intended to be limited, by the following example.

EXAMPLE I

20 In this example, the supplier is a mail delivery service, say PostCo, and the customer is a law firm that uses PostCo to deliver and receive important, confidential documents as an either same-day or overnight time-frame.

- 1) determine customer use(s) of *the supplier's* information, products and/or services. Determine and include performance outcomes, time frames and standards for how *the customer uses the supplier's* information, products and/or services;

25 The type of information that would be collected to form database #1 would include descriptions such as:

- the customer uses the delivery service to quickly, efficiently and correctly send original documentation to their customers
- the performance outcome begins with pickup of an envelope and ends with its
 30 delivery to the address of the 2^o customer (the law firm's customer)

- the service attaches a bar-code to each envelope to assist in its tracking
- the information pertaining to delivery is entered into the supplier's computerised tracking system
- the law firm has PostCo deliver, on the average, 50 documents a day
- 5 - the law firm must have correct delivery so S, the quality standard, must equal 1.0
- the law firm requires overnight delivery, at the latest

- 2) acquire customer financial data indicating the value of the supplier's information, products and/or services to the customer;
- 10 - the competitor delivery system costs \$3 less per letter
 - the competitor does not have a computer/bar code system
 - lost deliveries cost the law firm an estimated \$100 to re-produce the documents and courier them to their destination
 - this customer pays PostCo approximately \$500 per week in delivery expenses

- 15 3) calculate Operational Assessment equation for *the supplier's* information, products and/or services;

$$PO = 50 \text{ documents} \quad S = 1.0 \quad \text{Time} = 1 \text{ day}$$

$$\frac{(PO)S}{T} = R \quad \frac{(50) 1.0}{1 \text{ day}} = 50$$

- 20 4) identify the supplier's assets are that are of particular value to the customer;
- speed of delivery
 - assurance of delivery (good track record)
 - computerized tracking system
 - volume of deliveries/week

- 25 5) assess whether, and to what extent change in an asset would affect the operational assessment equation;
- increasing delivery time would cause R to decrease
 - decreasing assurance of delivery would cause R to decrease

Perform steps 6-8 with regard to increased delivery time (for example). These steps should be repeated for each asset of interest:

- 6) assess the financial impact to the customer associated with change in this asset;
- what if PostCo increases delivery time to a day and a half
 - this would be represented by $(50)1.0 = 33.3$
1.5
 - would cause the law firm to hire another delivery system (increasing "mis-deliveries" and related costs), and probably the local letters would be delivered by couriers; they estimate this would increase their "delivery expenditures" by \$300 per week.

- 7) assess the financial impact to the supplier associated with change in this asset with respect to how the change:

- i) impacts customer obtainment?**

- not applicable for this query because customer was already obtained. rather this question would be pertinent if this analysis was being conducted with a potential customer.

- ii) **impacts customer acceptance?**

- the asset is so valuable to the customer that the leave. The financial impact of this loss is best reflected in iii) below, so it will be measured there.

- iii) impacts customer retention?

- customer would choose to stop using PostCo, and would hire another service; this loss of customer will cost the supplier the \$500 they normally receive from the customer

- iv) **impacts use of the DIPS?**

- the DIPS become completely unused by this customer. Again, this is most

appropriately measured in iii)

- 8) The value of a said asset is estimated from analyzing the information obtained in steps 6 and 7, weighted by considerations of relevancy to the assessment (for example, the reasoning indicates that some factors in step 7 are not applicable, so their weighting is 0 for this query).

5

For this one query of this one customer, the estimated value for the cost of this asset would range between \$500/week/customer (the loss to weekly revenue from losing this customer) and \$800/week/customer (the loss to weekly revenue from losing this customer combined with the cost to the customer). Note that this estimate is based only one sampling of one customer. The range of the estimate would decrease to yield a more precise estimate as the number of customer's queried and analyzed increases. The estimate would become more reflective of the "averaged" customer population as the types of customers analyzed expands to include a more representative sampling of the supplier's customer base. This concept is well known to those skilled in statical analysis.

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From the foregoing description, one skilled in the art can easily ascertain the essential characteristics of this invention, and without departing from the spirit and scope thereof, can make various changes and modifications of the invention to adapt it to various usages and conditions. Consequently, such changes and modifications are properly, equitably, and "intended" to be, within the full range of equivalence of the following (future) claims.

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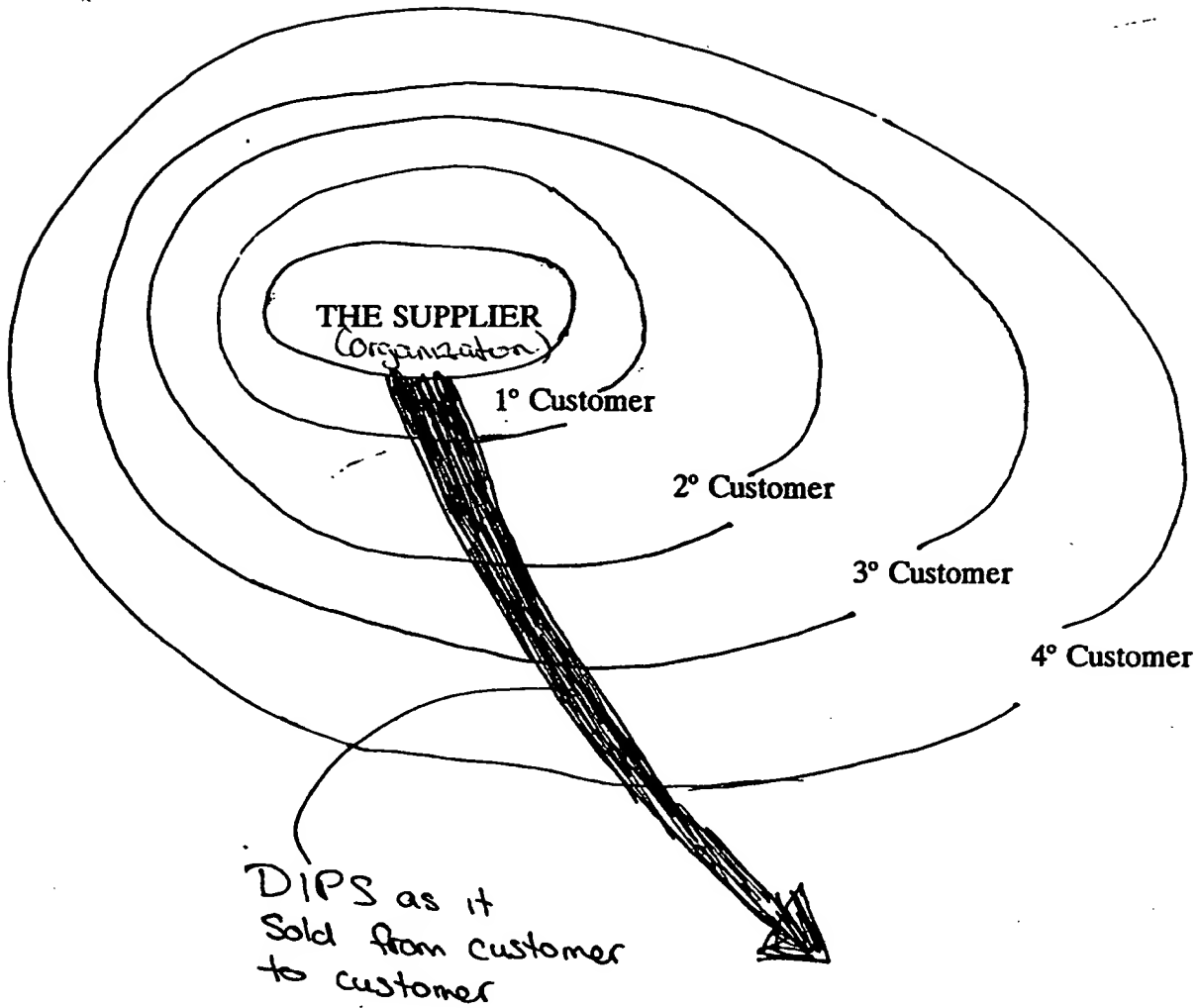


FIGURE 1

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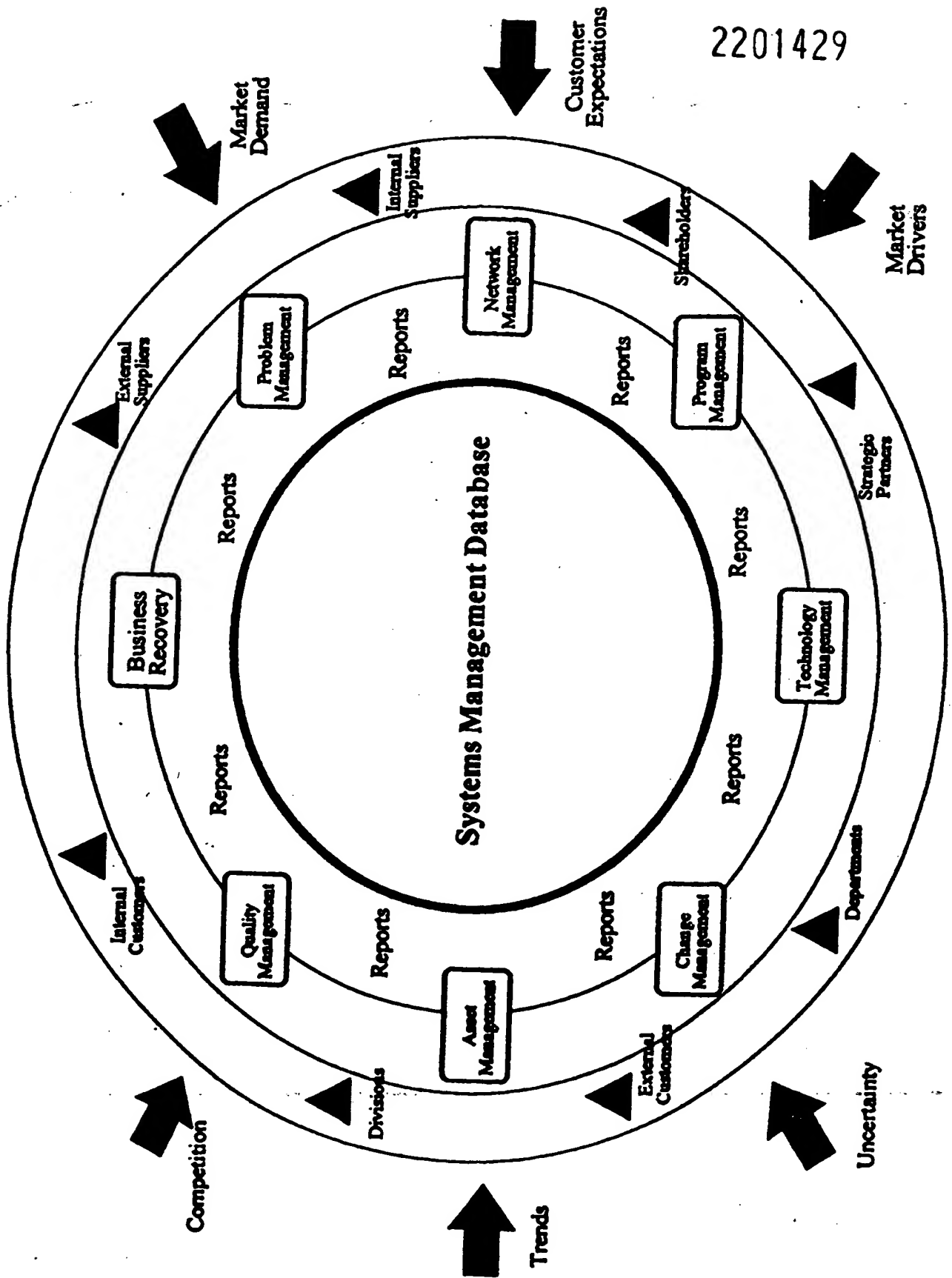
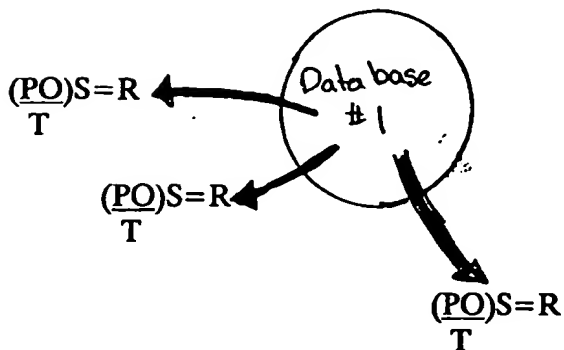


FIGURE 2

- 1) Data base #1 containing information regarding the act(s) between supplier and the customer

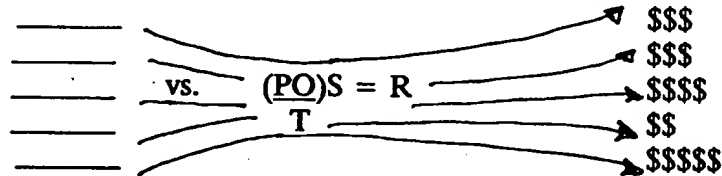
- 2) Data base #2 containing information regarding the financial data related to the act(s) between supplier and customer



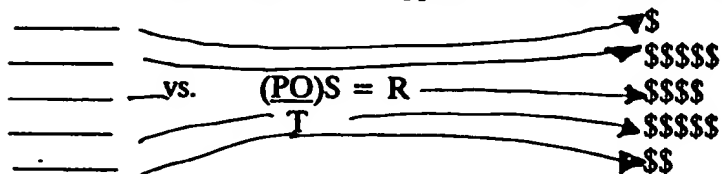
- 3) Define the Operational Efficiency for act(s)
Each equation becomes an axis of analysis

- 4) _____ Analyze data bases #1 and #2
_____ to identify and define a list
_____ comprising assets of the
_____ supplier

- 5) Analyze the relationship (particularly financial) between each asset and the act *from the point of view of the customer*, for each axis of analysis



- 6) Analyze the impact (particularly financial) of changes in a said asset *as it affects customer relationship to the supplier*, for each axis of analysis



- 7) The value of a said asset is determined from combining the information obtained in step 5 and 6.

_____ is valued at \$\$\$\$\$\$

FIGURE 3

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